

Our Ref: 01.01.01.01-5017U  
UKOP Doc Ref:1201951



Offshore Petroleum Regulator  
for Environment & Decommissioning

TAILWIND MISTRAL LTD  
62 BUCKINGHAM GATE  
LONDON  
UNITED KINGDOM  
SW1E 6AJ

Registered No.: 04458621

Date: 22nd April 2022

Department for Business, Energy  
& Industrial Strategy

AB1 Building  
Crimon Place  
Aberdeen  
AB10 1BJ

Tel [REDACTED]  
Fax [REDACTED]

[www.gov.uk/beis](http://www.gov.uk/beis)  
[bst@beis.gov.uk](mailto:bst@beis.gov.uk)

Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING  
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS  
2020  
GANNET EAST FIELD: TIE IN OF PRODUCTION PIPELINE PL6019**

A screening direction for the project detailed in your application, reference PL/2225/0 (Version 2), dated 28th February 2022 has been issued under regulation 6 of the above Regulations. The screening direction notice, and any relevant conditions and comments are attached. A copy of this screening direction will be forwarded to the application consultees, the Oil and Gas Authority and published on the gov.uk website.

If you have any queries in relation to this screening direction or the attachments, please do not hesitate to contact [REDACTED] on [REDACTED] or email the Environmental Management Team at [bst@beis.gov.uk](mailto:bst@beis.gov.uk).

Yours faithfully



**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING  
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS  
2020**

**SCREENING DIRECTION CONFIRMING THAT AN ENVIRONMENTAL IMPACT  
ASSESSMENT IS NOT REQUIRED**

**GANNET EAST FIELD: TIE IN OF PRODUCTION PIPELINE PL6019**

**PL/2225/0 (Version 2)**

Whereas TAILWIND MISTRAL LTD has made an application dated 28th February 2022, under The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020, and whereas the Secretary of State has considered the application and is satisfied that the project is not likely to have a significant effect on the environment; in exercise of the powers available under regulation 6, the Secretary of State hereby directs that the application for consent in respect of the project need not be accompanied by an Environmental Impact Assessment, provided that the project is carried out as described in the application for the screening direction and in accordance with the conditions specified in the attached schedule.

In giving a screening direction under regulation 6 of the above Regulations, the Secretary of State accordingly gives agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application PA/3729.

Effective Date: 22nd April 2022



## **THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020**

### **SCHEDULE OF SCREENING DIRECTION CONDITIONS**

The grant of this screening direction is conditional upon the screening direction holder complying with the following conditions.

#### **1 Screening direction validity**

The screening direction shall be valid from 1 May 2022 until 30 April 2023.

#### **2 Commencement and completion of the project**

The holder of the screening direction must confirm the dates of commencement and completion of the project covered by the screening direction. Notification should be sent by email to the Environmental Management Team Mailbox: [bst@beis.gov.uk](mailto:bst@beis.gov.uk)

#### **3 Nature of stabilisation or protection materials**

##### **Rock deposits**

18,061 (Eighteen thousand and sixty one) tonnes of clean, inert rock material, containing minimal fines, (The quantity of rock deposited should be the minimum required to provide the necessary stabilisation or protection, and any surplus rock must be returned to land).

##### **Grout bags deposits**

1,720 (One thousand seven hundred and twenty) X 25 (twenty five) kilogramme capacity biodegradable bags filled with grout. (The number of bags deposited should be the minimum required to provide the necessary protection, and any surplus bags must be returned to land).

##### **Concrete mattress deposits**

58 [Fifty Eight] concrete mattresses, each measuring 6 metres x 3 metres x 0.15 centimetres and 20 [Twenty] concrete mattresses, each measuring 6 metres x 3 metres x 0.3 centimetres.

(The number of mattresses deposited should be the minimum required to provide the necessary protection, and any surplus mattresses must be returned to land).

##### **Sand filled sacks**

20 (Twenty) X one tonne capacity salt sacks filled with loose sand. (The number of



bags deposited should be the minimum required to provide the necessary protection, and any surplus bags must be returned to land).

#### **4 Location of pipeline and stabilisation or protection materials**

As stated in the application.

#### **5 Prevention of pollution**

The holder of the screening direction must ensure that appropriate measures are taken to minimise discharges, emissions and waste, in particular through the appropriate use of technology; and to ensure that necessary measures are taken to prevent incidents affecting the environment or, where they occur, to limit their consequences in relation to the environment.

#### **6 Inspections**

Should the Department consider it necessary or expedient for an inspector appointed by the Secretary of State to investigate whether the conditions of the screening direction are being complied with, the holder of the screening direction shall afford the inspector with such facilities and assistance as the inspector considers necessary to exercise the powers conferred by the regulations. The holder of the screening direction shall additionally ensure that copies (electronic or paper) of the screening direction and any other relevant documents are available for inspection by the inspector at:

- a) the premises of the holder of the screening direction; and
- b) the facilities undertaking the project covered by the screening direction.

#### **7 Monitoring**

The results of any pre or post-placement surveys carried out to confirm the necessity for the deposits covered by the screening direction and/or to confirm the accurate positioning of the stabilisation or protection materials, should be forwarded to the Department following completion of the surveys

#### **8 Check monitoring**

Should the Department consider it necessary or expedient to undertake an independent monitoring programme to assess the impact of the project covered by the screening direction, the screening direction holder shall afford the Department with such facilities and assistance as the Department considers necessary to undertake the work.

#### **9 Atmospheric emissions returns**

Following completion of the project covered by the screening direction, the holder of the screening direction shall report all relevant atmospheric emissions, such as



combustion emissions, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting forms.

### **10 Deposit returns**

The holder of the screening direction shall submit a report to the Department following completion of the deposit covered by the screening direction, confirming the quantity of materials deposited and the estimated area of impact, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting form. Where no deposits are made, a 'nil' return is required.

### **11 Unauthorised deposits**

Following completion of the project covered by the screening direction, the holder of the screening direction shall recover any materials accidentally or temporarily deposited on the seabed, such as debris, temporary containers, structures or deposits, or scientific instruments, and shall return the materials to land. If it is not possible to recover any of these deposits, full details of the materials remaining on the seabed must be reported to the Department in accordance with the requirements of Petroleum Operations Notice No.2 (PON2).

### **12 Screening direction variation**

In the event that the holder of the screening direction proposes changes to any of the particulars detailed in the application for a screening direction, the holder must notify the Department immediately and submit an application for a post screening direction amendment. The post screening direction must be in place prior to the amended proposals taking effect.

Our Ref: 01.01.01.01-5017U  
UKOP Doc Ref:1201951



Offshore Petroleum Regulator  
for Environment & Decommissioning



## COMMENTS ON THE APPLICATION FOR SCREENING DIRECTION

### Section 1

The attention of screening direction holders is drawn to the following provisions regarding The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020.

1) You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the project covered by the screening direction. The issue of a screening direction does not absolve the screening direction holder from obtaining such authorisations, consents etc that may be required under any other legislation.

2) The Department would draw your attention to the following comments:

The Department has no comments.

3) All communications relating to the screening direction should be addressed to:

bst@beis.gov.uk

or

Offshore Petroleum Regulator for Environment & Decommissioning  
Department for Business, Energy & Industrial Strategy  
AB1 Building  
Crimon Place  
Aberdeen  
AB10 1BJ

Tel [REDACTED]

Fax [REDACTED]



## **SCHEDULE OF SCREENING DIRECTION DECISION REASONS**

### **Installation of new production flowline PL6019 and valve skid and jumper upgrade linking existing/ new wells at Gannet E to production at Triton FPSO, Tailwind Mistral Limited**

The Secretary of State has decided that, based on the information provided, the project is not likely to have a significant effect on the environment. The main reasons for this decision are:

#### **1) Decision reasons**

This provides a summary of the assessments undertaken by OPRED (Offshore Petroleum Regulator for Environment and Decommissioning) to determine whether an Environmental Impact Assessment is required for this project. It summarises the information considered, the potential impacts and sets out the main reasons for the decision made.

In considering whether an Environmental Impact Assessment is required or not, the following have been taken into account:

- a) The information provided by the developer.
- b) The matters listed in Schedule 5 of The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Regulations 2020) (The Regulations).
- c) The results of any preliminary verifications of the effects on the environment of the project; and
- d) Any conditions that the Secretary of State may attach to the agreement to the grant of consent.

#### **Characteristics of the project**

Having regard, in particular, to the matters identified in Schedule 5 1(a) to (g) of the Regulations, the characteristics of the project include the following:

#### **Summary of project**

Gannet East field development, located in Block 21/30c consists of three wells, GE-01 GE-02 and GE-03, the latter, the most recently drilled which is to be tied for production to Triton Floating Production Storage and Offloading (FPSO) vessel operated by Dana Petroleum (E&P) Limited (Dana). It will flow to a new valve skid to be piled at the Gannet East drill centre mediating production, gas lift and services (chemical, hydraulic and electrical) within this 500m safety zone and onward via a trenched and buried new (3.82km) 9" flexible production pipeline (PL6019) to Gannet





East, Evelyn, Belinda and Bittern (GEEBB) manifold, proposed for installation by Dana in the Triton FPSO 500m exclusion zone. Tie in via jumpers and spools (to be stabilised by grout bags and mattresses) will be done at both Gannet East end (Tailwind) and Triton end (Dana BEIS Ref: PLA/900) linking up production and services between the field well and FPSO. Jumpers and spools will be surface laid at both Gannet East and Triton 500m safety zones to accommodate existing pipelines, crossing over these with grout bags, mattress and rock deployed for stabilisation. The OGA pipeline works authorisation request for the pipelay by Tailwind is PA/3729. Rock will be deposited at both a 90 degree turn in the 3.82km production pipeline where trenching cannot be undertaken and where insufficient trench and burial is achieved to mitigate upheaval buckling. A maximum of 18,061 tonnes of rock is required for stabilisation of the pipeline and will be deposited by a fall pipe vessel.

### **Description of project**

Prior to work commencing, existing barriers at the GE-03 well tree, Gannet East manifold and tie in structure will be barrier tested using dyed MEG supplied by vessel, pressurised, depressurised and discharged following proof of isolation. The existing production (PL4417 to be renamed PL6018) and gas lift (PL4421 to be renamed PL6012) jumper between GE-03 well and Gannet East manifold will be flushed with two line volumes of dyed MEG from a vessel injected at GE-03 well pushing hydrocarbons into the production system back to Triton FPSO. The jumpers will be disconnected, with a minimal worst case 0.04kg of residual hydrocarbon discharged with dyed MEG. These jumpers will be left in situ until they are decommissioned and replaced with a new flexible 6" production (PL4417), 9" production jumper (PL6019) and two 3" gas lift jumpers PL4421 prefilled onshore with MEG/water. This will be discharged when flanges containing jumper contents are removed at tie in.

Two electrical jumpers (PL6069/PL6068) and umbilical jumpers (PLU6015/PL6016) providing communications and chemical supplies between both the Gannet East manifold and the proposed new Gannet East tie in valve skid and umbilical jumpers between GE-03 well and the valve skid (PLU6017) all located in the Gannet East Drill Centre 500m safety exclusion zone will be installed. These jumpers will be pre-filled with chemicals onshore. At tie in, flanges containing chemical contents need to be removed from control jumpers which could result in a worst case of 5% of hydraulic fluid being discharged, the majority of chemical remaining in the closed jumper systems. All jumpers will be surface laid and grout bags and mattress placed over them for protection.

A 3.82km new 9" flexible production pipeline PL6019 will be pre-laid by construction support vessel, reeling it onto the seabed to be trenched (with a 30 degree slope) and backfilled using a multi pass plough to achieve a target depth of 1.6m by a trenching support vessel apart from at other operator pipeline/ umbilical crossing points (eight in total) and the proposed 90 degree bend in the pipeline where the plough will transition out and back into sediment to enable surface laying of pipeline. The trench transitions from surface to target depth covers a minimum distance of 50m and those areas together with surface laid pipeline, jumpers and spools will



have a mix of rock, concrete mattress and grout bag for added protection. Rock will be laid by flexible fall pipe vessel monitored by Remotely Operated Vehicle (ROV) to ensure accuracy. Where rock is used for crossing protection, berm width will be a maximum of 7m and height of 0.6m. Where insufficient burial depth is achieved during ploughing, identified by post lay survey vessel, rock will be deposited to prevent thermal and pressure induced upheaval buckling of the pipeline. The 9" production pipeline will be laid between the new Gannet East tie in valve skid (located in the Gannet East 500m safety exclusion zone) which will be piled in place and the new Gannet East, Evelyn, Belinda and Bittern manifold (GEEBB), a gravity based structure to be located in the Triton FPSO 500m safety exclusion zone which Dana are proposing to install to link Gannet production to Triton FPSO Bittern production riser. Gannet East fluids will be mingled with other fluids from GEEBB named fields for processing at Triton.

A maximum of 18,061 tonnes of rock, grout bags, salt sack and mattresses are required for stabilisation of the flexible pipeline when transitioning to full burial, where inadequate burial has been achieved by trenching, at the 90 degree bend and where crossing other pipelines. Operations are proposed to start on 1st May 2022 and take 51 days to complete with an end date including potential delays of 30th April 2022. A guard vessel will be deployed when vessels are not in field to protect the pipeline. The OGA consent application PA/3729 details the pipeline, spools, jumpers and deposits to be laid.

After removing flanges and connecting, the production and gas system together all remaining connections will be leak tested using dye sticks and dyed MEG with most chemical now contained by the newly connected pipeline system being discharged at Triton FPSO. Biocide will be added to protect the cavities between new jumper connections. The gas lift system will be further proved using dyed MEG from a vessel by pressurising and depressurising it with discharge to sea. Any remaining chemical in the system will be discharged at Triton FPSO.

The risk of an unplanned diesel release from the vessels involved with the operations was considered and is covered by each vessels Ship Oil Pollution Emergency Plans. The potential for a major accident from working over live pipelines or spillages from the pipe lay vessels was considered. The live pipelines are buried and mattress pre-laid over them prior to laying the new pipeline. The developer has control measures in place to reduce the risk of an unplanned release occurring and the probability of such an event occurring is highly unlikely.

No cumulative impacts are expected to occur with any other existing or approved projects.

It is not considered to be likely that the project will be affected by natural disasters or unplanned major accident scenarios and there is no risk to human health. Other than the matters considered further below, there is not likely to be any significant impact of the project on population and human health.

Tie-in activities at the GEEBB will be carried out in parallel to this project during 2022,



as per BEIS Ref: PLA/900 and in parallel to tie in of Evelyn field to Triton (BEIS Ref: PLA/875).

### **Location of the project**

Having regard, in particular, to the matters identified in Schedule 5 2(a) to (c) of the Regulations, the environmental sensitivity of geographical areas likely to be affected by the project has been considered as follows.

The project area includes the Gannet East Field drill centre 500m safety exclusion zone with the pipeline route ending in the Guillemot West field (Triton FPSO), both are located in the UK Continental Shelf (UKCS) Block 21/30 in the central North Sea (CNS). The Gannet East Tie-in Valve Skid is located 164 km east of Aberdeen, 89 km west of the UK/Norwegian median line while the Triton FPSO is 170km and 86km respectively from the relevant coast and median line.

The project area is not located within any protected areas. The closest SAC to the proposed operations is the Scanner Pockmark Special Protected Area (SAC), which is located approximately 131 km to the north of Gannet East. The closest offshore Nature Conservation Marine Protected Area (NC MPA) to the proposed operations is the East of Gannet and Montrose NC MPA, located approximately 7 km to the east, designated for OSPAR listed as threatened and/ or in decline Ocean quahog. The 2021 survey did not find any of this species.

Recent environmental baseline survey data (2021) of the Gannet East area, recorded water depth ranging between 86 to 99.5m and 95.8m at Triton FPSO, average residual current of 0.01m/s and spring tides of 0.01-1.0 m/s, winds prevail from the southwest and north north-east, exceeding 8m/s during the majority of winter and more variable speeds in summer.

Sand and slightly gravelly sand covers most of the central North Sea which can have significant mud content, classified 'Deep Circalittoral Sand' with the potential for 'Offshore subtidal sands and gravels' habitat, a Priority Marine Feature (PMF). The 2021 survey found sand, muddy sand and sandy mud with circular depressions consisting of shell fragments with occasional boulders and cobbles and at Gannet East sample stations showed fine to very fine sand. The sediment is heavily bioturbated with numerous burrows suitable for the OSPAR listed 'seapen and burrowing mega fauna community' to be present and the abundance of seapens on the SACFOR scale was occasional to frequent indicating the potential that this habitat is present.

The block is 4km southwest of the PMF 'deep sea mud' and the pipeline is 4.5km north and 7.2km south at nearest point from Annex I 'submarine structures made by leaking gases' but the circular depressions found at locations along the pipeline route did not indicate active pockmarks.

The 2021 survey showed homogenous benthic species along the pipeline route dominated by polychaetes, sea pens, anemones, starfish and hermit crab. Faunal



turf, hydroids, soft coral, sea urchins, sea mouse, whelk, spider and king crab were also found.

Tubes and burrows indicate the potential presence of Norway lobster. Spawning species/ periods of note during the proposed operations include mackerel (May to June peak and July), nephrops/ lobster (May/ June peak, all year), sandeel (November, December) and lemon sole (May to September) and thirteen nursery species including anglerfish, blue/ whiting, cod, link, Norway pout, herring, mackerel, sandeel and spurdog which are PMF. Sandeels are less likely to spawn in the area due to greater than 10% silt content found during surveys. Cod is OSPAR listed as threatened and/ or in decline.

The proposed project is located in International Council for the Exploration of the Sea (ICES) Rectangle 43F0. While fisheries mostly targeted pelagic species in 2020, with the highest effort, weight and value, demersal species dominated previous years from 2016 but overall effort is small in a UK context.

Atlantic white-sided/ bottlenose and common dolphin, harbour porpoise, minke and white-beaked whale have been observed in the vicinity of the proposed operations. Densities of these species are predominantly moderate where data is available. All species are all listed as PMF, species of national importance (European protected species). Grey and harbour seals are unlikely to be encountered regularly 164km offshore. The seal species, bottlenose dolphin and harbour porpoise are Annex II species.

Outwith seabird breeding at the coast, they disperse offshore. Seabirds present in the project area include fulmar, gannet, species of skua, gull, kittiwake, guillemot, razorbill, auk and puffin some of which have been subject to declines in numbers. Seabird sensitivity to accidental spill is recorded as low in Block 21/30.

The proposed operations are located in an area that experiences very low shipping intensity. The nearest oil and gas activity is 2.7km away. There are no military restrictions on Blocks 21/30 and there are no known military activities within the area.

There are no cables in the immediate vicinity of the proposed operations. The nearest offshore wind development is 139km away and areas identified for wind 35km away. The closest wreck is 5km northeast.

Given the location of the project, it is not likely that the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) or (viii) of Schedule 5 to the Regulations will be affected by the project.

### **Type and characteristics of the potential impact**

In accordance with paragraph 3 of Schedule 5 to the Regulations, the likely significant effects of the project on the environment have been considered. Potential effects on the environment from the activities associated with the project were assessed, including impacts arising from atmospheric emissions, seabed



disturbance, physical presence, underwater noise, planned discharges, accidental spills and cumulative impacts.

Other than the matters considered further below, there is not likely to be any significant impact of the project on population and human health.

The operator has minimised emissions by reel laying the flowline, reducing installation time. Impact on air quality will be limited due to rapid dispersion offshore with no likely significant impact.

There will be a loss of seabed habitat with associated OSPAR listed potential 'seapen and burrowing megafauna community' habitat, Norway lobster which inhabits burrows and the potential for OSPAR listed as threatened and/ or in decline ocean quahog (with siphon for feeding and respiration) associated with the footprint of the pipeline, valve skid, jumpers and deposits amounting to 0.191km<sup>2</sup>. Deposit of grout bag and mattress are likely to be recoverable at decommissioning, but rock deposit will result in a loss of burrowing habitat and is likely to be colonised by other species. The impact is very small and not considered significant.

Disturbance impacts amount to 0.0382km<sup>2</sup> of seabed. 5.6m trenched and 5m disturbance either side and indirect disturbance from re-suspension of fines resulting in localised smothering of the seabed in the immediate area over a short period of time. Seapens and burrowing megafauna are sensitive to disturbance but impacts will be localised and seapens can re-anchor. Sandeel are unlikely to be found due to the high silt content. Norway lobster are less sensitive to smothering. The slower speed of trenching to achieve accuracy will minimise direct disturbance and backfill will enable recolonisation. Sediment and current indicate a quiescent benthic environment which is why the trench will be backfilled to remove mounds and scars enabling faunal recovery. The area of seabed impacted by loss and disturbance is very small, representing a small area of similar habitat and therefore impacts are not considered to be significant.

Five vessels will work over different periods contributing to the overall duration of the project of 51 days moving over a limited area of sea within and outwith the 500m exclusion zone at Gannet East and Triton FPSO with negligible loss of access to other sea users. A collision risk assessment and vessel traffic survey has been undertaken. There is potential interaction with low volume routine fishing and shipping vessels in proximity to the project. The operator will be required to communicate with vessels and notify activities to keep other users informed and there is a wide expanse of water available for navigation. There are therefore no significant navigational concerns.

The pipeline crossings, 90 degree pipeline bend and spot rock locations will be designed not to impact fishing activity which will continue as normal.

The Gannet East tie in valve skid will have four piles pin piled (pre-drilled and piled rather than impact piled) in place over a total of 8 hours to a depth of 20m. Modelling shows a potential zone of injury for most cetaceans of 10m from the source, apart



from harbour porpoise where this zone is likely to extend to 50m but with a fourfold reduction in sound energy between 10 and 50m from source. An area of significant disturbance of 172km<sup>2</sup> was determined affecting 159 individuals. Other noise sources are expected to be within background levels. The JNCC protocol for minimising risk of injury to marine mammals will be followed therefore noise impacts are unlikely to be significant. Timing of piling is not assessed to occur while other geophysical surveys or other noise related activities are being undertaken.

Commissioning of the new production system between Gannet East and Triton FPSO is scheduled for September 2022. The proving of existing asset barriers prior to flushing and disconnecting existing jumpers, removal of flanges containing pre-filled chemicals on new jumpers and pressurising the gas lift system to confirm the integrity of the system will involve chemical discharges at Gannet East and Triton FPSO. These have been risk assessed and pose no significant impact on the environment.

There will also be a minor discharge of hydraulic fluid when tying in new control jumpers when removing flanges. As the existing production jumpers have been flushed prior to disconnection minimal hydrocarbon will be discharged when they are cut. All discharges have been risk assessed and do not pose a significant impact on the environment.

Although not a planned activity, an unplanned release of diesel from a vessel was assessed. The developer has mitigation and control measures in place to prevent this. The proposed operations carried out as planned are not likely to have a significant effect on the environment and the probability of an unplanned release from the proposed operations is low.

No planned construction operations, no aggregate dredging, military practice sites, sites of marine archaeological interests or aquaculture sites were reported within the vicinity of the proposed operations.

No objections were received from the consultees for the proposed operations. It is considered that the proposed operations to install PL6019 9" production flexible flowline, new valve skid, jumpers, spools and deposits including 18,061 tonnes of rock at specified locations along the pipeline is not likely to have a significant impact. There will be no impact cumulatively with other activities or other users of the sea and no cumulative impacts are expected to occur. The proposal aligns with the policies in the National Marine Plan.

## **Decision**

Taking the above considerations into account, the Secretary of State has concluded that the project is not likely to have a significant impact on the environment and that an environmental impact assessment is not required.



## **2) Mitigation of significant effects**

The following are features of the project or measures envisaged that the developer has proposed to avoid or prevent what might otherwise have been significant adverse effects on the environment:

Not applicable